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10/660,651	09/12/2003	Masato Fukuda	00862.023284.	7558
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/660.651 FUKUDA, MASATO Office Action Summary Examiner Art Unit CHAD DICKERSON -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 27 August 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 14-17 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 14-17 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

4) Interview Summary (PTO-413) Paper No(s)/Mail Date.

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DETAILED ACTION

Response to Arguments.

- Applicant's arguments, see page 5, filed 8/27/2009, with respect to the 112 1st paragraph rejections have been fully considered and are persuasive. The 112 1st paragraph rejection of claims 1, 8 and 10 has been withdrawn.
- 2. Applicant's arguments with respect to claims 14-17 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims has necessitated the new ground(s) of rejection. However, the same reference of Holmstead is still being applied. In the arguments filed on 8/27/2009, the Applicant asserted that the combined references fail to teach the feature of deleting image data from the cache memory when the image data is in the cache list and not in the print list. The Examiner respectfully disagrees with this assertion.

When viewing the claim limitation, the Examiner interprets the limitation as the system deletes image data from the cache memory when the image data appears in the cache list and not in the print list. The Examiner believes this feature is taught with the reference of Holmstead combined with the new applied reference of Sesek '098. In the reference of Holmstead, the system contains a print list in the input buffer that includes print data to be printed, but the print list may not contain all of the printing elements to complete the job. The cache memory (302) stores a list of image data that is already stored on the print system¹. The Holmstead reference acquires the other missing information from a server containing the rest of the missing elements of the image data.

¹ See Holmstead '905 at ¶ [0032]-[0044].

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Image data can be deleted when the image data is listed in the cache memory, but the image data is not in the input buffer at the time when the deletion function takes place². The deletion function performs the broad feature of the invention simply because it can delete information listed in the cache memory while this same information is not listed in the input buffer considered as the print list. Having deleted image data not present in the print list but in the cache list is considered as information not present in the input buffer at all and present in the cache memory or information present in the input buffer that is different from the data to be deleted in the cache memory. In both cases, image data in the cache memory can be deleted while this same deleted information is not present in the print list considered as the information in the input buffer. Therefore, the Examiner believes the above feature is performed.

Additionally, the reference of Sesek '098 is being applied to cure any deficiencies of the previously applied reference regarding the claim features of storing a cache list in a first memory or storage unit. For example, in figure 2 the invention of Sesek discloses having a memory that contains the print-ready document list, which is a list of cached data. The invention allows for this list to be checked when outputting a document for the purposes of making sure the document is not already stored at the printing device³. Therefore, with the combination of the above references, the claim features introduced in the Amendment are performed.

Claim Rejections - 35 USC § 103

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² ld. at ¶ [0046]-[0051].

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 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Holmstead '905 (US Pub 2004/0021905) in view of Sesek '098 (Us Pub 2003/0086098).

Re claim 14: Holmstead '905 discloses an information processing apparatus communicating with a server device and a printer (i.e. a graphical user interface (114) sends commands to the printer device to operate the control system (306) in a normal or schedule mode. This controls the printer since the control system is commanded to download print job elements from a server specific to the mode used in order to print a print job that is generated from the print job elements; see paragraphs [0033] and [0060]-[0071]), the information processing apparatus comprising:

a cache memory constructed to cache image data transmitted to the printer (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored

³ See Sesek '098 at ¶ [0028]-[0040].

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in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

a designation unit constructed to designate image data to be printed among image data stored in the server device (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

a second storage unit constructed to store a print list of the image data to be printed (i.e. in the system, the control system is used to create one or a series of print job elements that are used to make up print job data that is to be acquired from a remote site, considered as a server device. The first list is in regards to the print job ticket (500) generated and stored in the input buffer (304). The job ticket stored in the input buffer represents a plurality of image data that are designated to be printed and

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can be acquired from a server device if needed; see figs. 3-5; paragraphs [0032]-[0044]);

a comparison unit constructed to compare the cache list and the print list (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraphs [0032]-[0044]),

a download unit constructed to download the image data which is in the print list but not in the cache list (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication. Since the internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input buffer and local memory is an alternative implementation of the method of printing image data. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job

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elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

a deletion unit constructed to delete from the cache memory the image data which is in the cache but not in the print list (i.e. in the system, the information stored in the different directories can be overwritten or erased. As disclosed in Holmstead, the image data represented through print job elements can be erased after a certain period of time. When the system has seen that the job is a certain age, it may delete the job. This job can be a job that is not designated to be printed at the time the job reaches a certain age (i.e. 30 days old). The system has stored the image data in the local memory since the job has been printed in the past. With the job being transmitted from the host computer's local memory, considered as the cache memory, to the printer earlier than the thirty day job threshold and not being designated at the time of the thirty day time period, the feature of deleting information from the local memory, or cache memory, but not in the print list in the input buffer is performed; see paragraph [0051]);

a transmission unit constructed to transmit the image data to be printed to the printer (i.e. in the system, the host computer can be coupled to a printer and transmit information to the printing device through a USB connection or a network; see fig. 2, paragraphs [0029]-[0033]).

However, Holmstead '905 fails to specifically teach a first storage unit constructed to store a cache list of the image data cached in the cache memory.

However, this is well known in the art as evidenced by Sesek '098. Sesek '098 discloses a first storage unit constructed to store a cache list of the image data cached

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in the cache memory (i.e. the Sesek reference, like the Holmstead reference, contains a system that involves a host computer to transfer printing information to a printing device (same field of endeavor). However, in the system of Sesek '098, the system discloses a memory device that stores a cache list of image data cached in the printing system.

The cache list documents, or print-ready documents, are able to be updated and printed in the system; see ¶ [0028]-[0040]).

Therefore, in view of Sesek '098, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a first storage unit constructed to store a cache list of the image data cached in the cache memory, incorporated in the device of Holmstead '905, in order to have the caching of network documents to decrease the amount of time a user has to wait for documents to be output (as stated in Sesek '098 ¶ [0003]-[0005]).

Re Claim 15: The teachings of Holmstead '905 in view of Sesek '098 are disclosed above.

Holmstead '905 discloses the information processing apparatus to Claim 14 further comprising an updater constructed to update the cache with the print list (i.e. in the system, the local memory is updated with the information that has been obtained by the system and temporarily stored on the input buffer after the image data is received from the server device on the network. Once all of the information in the input buffer is printed, the cache is updated by the information in the print list that can be printed again in the future; see paragraphs [0033]-[0044]).

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However, Holmstead '905 fails to specifically teach to update the cache list after the deletion of image data is performed by the deletion unit.

However, this is well known in the art as evidenced by Sesek '098. Sesek '098 discloses to update the cache list after the deletion of image data is performed by the deletion unit (i.e. the Sesek reference, like the Holmstead reference, contains a system that involves a host computer to transfer printing information to a printing device (same field of endeavor). However, in the system of Sesek '098, when a more updated version of the already stored print-ready document is detected by the printer's controller, the system will delete the old image data of the print-ready document and update the cache list with the most up to date version of the document. Thus, the above claim feature is performed; see ¶ [0032]-[0043]).

Therefore, in view of Sesek '098, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of to update the cache list after the deletion of image data is performed by the deletion unit, incorporated in the device of Holmstead '905, in order to have the caching of network documents to decrease the amount of time a user has to wait for documents to be output (as stated in Sesek '098 ¶ [0003]-[0005]).

Re Claim 16: Holmstead '905 discloses an information processing method performed in an information processing apparatus communicating with a server device and a printer, the method comprising:

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caching in cache memory image data transmitted to the printer (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

designating image data to be printed among image data stored in the server device (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

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storing a print list of the image data to be printed (i.e. in the system, the control system is used to create one or a series of print job elements that are used to make up print job data that is to be acquired from a remote site, considered as a server device. The first list is in regards to the print job ticket (500) generated and stored in the input buffer (304). The job ticket stored in the input buffer represents a plurality of image data that are designated to be printed and can be acquired from a server device if needed; see figs. 3-5; paragraphs [0032]-[0044]);

comparing the cache list and the print list (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraphs [0032]-[0044]);

downloading the image data which are in the print list but not in the cache list (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication.

Since the internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input buffer and local memory is an alternative implementation of the method of printing image data.

The input buffer inside the host computer, considered as the storage unit containing the

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print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

deleting from the cache memory the image data which is in the cache list but not in the print list (i.e. in the system, the information stored in the different directories can be overwritten or erased. As disclosed in Holmstead, the image data represented through print job elements can be erased after a certain period of time. When the system has seen that the job is a certain age, it may delete the job. This job can be a job that is not designated to be printed at the time the job reaches a certain age (i.e. 30 days old). The system has stored the image data in the local memory since the job has been printed in the past. With the job being transmitted from the host computer's local memory, considered as the cache memory, to the printer earlier than the thirty day job threshold and not being designated at the time of the thirty day time period, the feature of deleting information from the local memory, or cache memory, but not in the print list in the input buffer is performed; see paragraph [0051]); and

transmitting the image data to be printed to the printer (i.e. in the system, the host computer can be coupled to a printer and transmit information to the printing device through a USB connection or a network; see fig. 2, paragraphs [0029]-[0033]).

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However, Holmstead '905 fails to specifically teach storing a cache list of the image data cached in the cache memory.

However, this is well known in the art as evidenced by Sesek '098. Sesek '098 discloses storing a cache list of the image data cached in the cache memory (i.e. the Sesek reference, like the Holmstead reference, contains a system that involves a host computer to transfer printing information to a printing device (same field of endeavor). However, in the system of Sesek '098, the system discloses a memory device that stores a cache list of image data cached in the printing system. The cache list documents, or print-ready documents, are able to be updated and printed in the system; see ¶ [0028]-[0040]).

Therefore, in view of Sesek '098, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of storing a cache list of the image data cached in the cache memory, incorporated in the device of Holmstead '905, in order to have the caching of network documents to decrease the amount of time a user has to wait for documents to be output (as stated in Sesek '098 ¶ [0003]-[0005]).

Re Claim 17: Holmstead '905 discloses a computer-readable medium storing a computer-executable program for an information processing method performed in an information processing apparatus capable of communicating with a server device and a printer (i.e. a graphical user interface (114) sends commands to the printer device to operate the control system (306) in a normal or schedule mode. This controls the printer since the control system is commanded to download print job elements specific

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to the mode use in order to print a print job that is generated from the print job elements, which is analogous to a plurality of image data; see paragraphs [0033] and [0060]-[0071]), comprising:

a step of caching in cache memory image data transmitted to the printer (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

a step of designating image data to be printed among image data stored in the server device (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the

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other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

a step of storing a print list of the image data to be printed (i.e. in the system, the control system is used to create one or a series of print job elements that are used to make up print job data that is to be acquired from a remote site, considered as a server device. The first list is in regards to the print job ticket (500) generated and stored in the input buffer (304). The job ticket stored in the input buffer represents a plurality of image data that are designated to be printed and can be acquired from a server device if needed; see figs. 3-5; paragraphs [0032]-[0044]);

a step of comparing the cache list and the print list (i.e. when the data is first received by the printer, or the host computer that is associated with the printer, the data is temporarily stored in the input buffer (304). The input buffer (304) holds the print job ticket (500) and compares the print job ticket (500) components with the components stored in the local memory (302). This comparison is between the data stored in the input buffer (304) and the data stored in the local memory (302) to see if the data matches up to the print job ticket's (500) listed components; see figs. 2-5; paragraphs [0032]-[0044]);

a step of downloading the image data which are in the print list but not in the cache list (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication. Since the internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input

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buffer and local memory is an alternative implementation of the method of printing image data. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

a step of deleting from the cache memory the image data which is in the cache list but not in the print list (i.e. in the system, the information stored in the different directories can be overwritten or erased. As disclosed in Holmstead, the image data represented through print job elements can be erased after a certain period of time. When the system has seen that the job is a certain age, it may delete the job. This job can be a job that is not designated to be printed at the time the job reaches a certain age (i.e. 30 days old). The system has stored the image data in the local memory since the job has been printed in the past. With the job being transmitted from the host computer's local memory, considered as the cache memory, to the printer earlier than the thirty day job threshold and not being designated at the time of the thirty day time period, the feature of deleting information from the local memory, or cache memory, but not in the print list in the input buffer is performed; see paragraph [0051]); and

a step of transmitting the image data to be printed to the printer (i.e. in the system, the host computer can be coupled to a printer and transmit information to the

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printing device through a USB connection or a network; see fig. 2, paragraphs [0029]-[0033]).

However, Holmstead '905 fails to specifically teach a step of storing a cache list of the image data cached in the cache memory.

However, this is well known in the art as evidenced by Sesek '098. Sesek '098 discloses a step of storing a cache list of the image data cached in the cache memory (i.e. the Sesek reference, like the Holmstead reference, contains a system that involves a host computer to transfer printing information to a printing device (same field of endeavor). However, in the system of Sesek '098, the system discloses a memory device that stores a cache list of image data cached in the printing system. The cache list documents, or print-ready documents, are able to be updated and printed in the system; see ¶ [0028]-[0040]).

Therefore, in view of Sesek '098, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a step of storing a cache list of the image data cached in the cache memory, incorporated in the device of Holmstead '905, in order to have the caching of network documents to decrease the amount of time a user has to wait for documents to be output (as stated in Sesek '098 ¶ [0003]-[0005]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Application/Control Number: 10/660,651
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 Ichihara (USP 7023575) discloses an image data printing system and image data printing method.

 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./ /Chad Dickerson/ Examiner, Art Unit 2625

/Twyler L. Haskins/ Supervisory Patent Examiner, Art Unit 2625